

TX station: 8xAky3

Gain solid integration : enabled

Site Name: Labelitaly

**General data of Antenna System**

TX station	8xAky3
Site Name	Labelitaly
System of coordinates	Geographic
Longitude	00°00'00.000"
Latitude	00°00'00.000"
Ground level a.s.l. (m)	100.0
Antenna system height (m)	50.0
Transmitter power(Watt)	1000.000
Carrier wave frequency (MHz)	98.000
Antenna system central frequency (MHz)	98.000
Antenna base diagrams type 1	LABEL ITALY-AKY_3 YAGI FM WB 3 ELEM.
Antenna base diagrams type 2	-
Polarization (H/V/C/X)	V
Transmitting cable attenuation (dB)	0.0
Additional attenuations(dB)	0.0
Base diagrams sectors (T = All, F = Front)	T
Velocity factor of cables to Antennas (0÷1)	0.88
Coordinate System(C = cartesian, P = polar)	P
Mast side / diameter(cm):	10.0
Mast cross section (T/Q/C)	C
Structure rotation w.r.t. North (°)	0.0
Mast rotation w.r.t. North (°)	0.0

**Information about antennas used in the System**

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	AKY_3 YAGI FM WB 3
Band start(MHz)	88
Band stop(MHz)	108
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	260
Height (cm)	180
Width (cm)	6
Thickness (cm)	125
Weight (Kg)	13
Maximum power (KW)	3
Gain (dBd)	5.22
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

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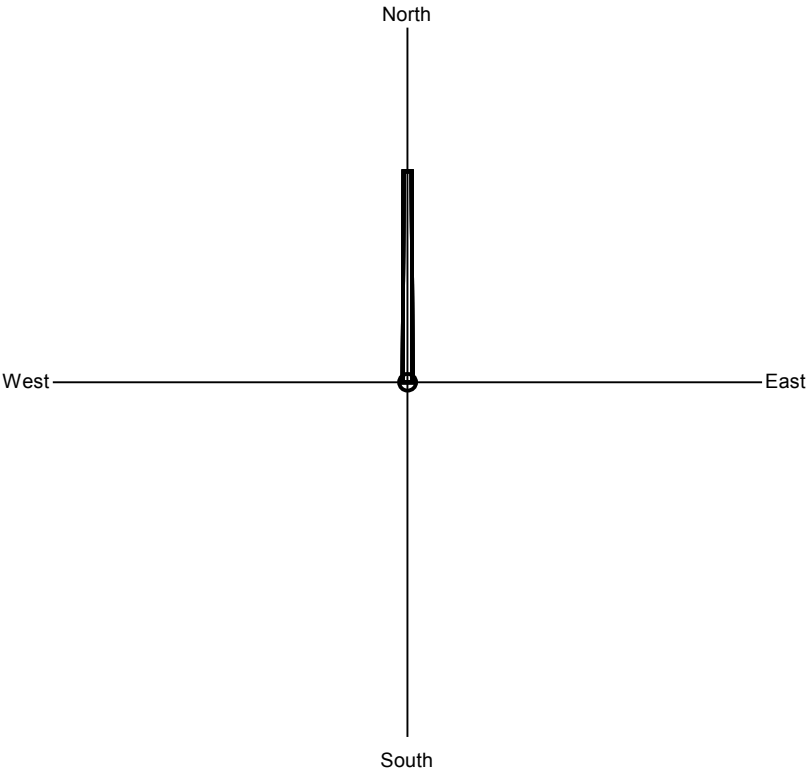
Geometr. and electrical data of Antenna System

	<i>Power</i> (%)	<i>Tilt</i> (°)	<i>Az.</i> (°/N)	<i>Phase</i> (°)	<i>V dist.</i> (m)	<i>Scr-d</i> (cm)	<i>Scr-Az</i> (°/N)	<i>Rot.</i> (1÷4)	<i>Type</i> (1÷2)	<i>L cables</i> (cm)	<i>Car. phase</i> (°)
1	12.500	0	0	0 +0.0	9.10	0.0	0.0	1	1	0.0	0.0
2	12.500	0	0	0 +0.0	6.50	0.0	0.0	1	1	0.0	0.0
3	12.500	0	0	0 +0.0	3.90	0.0	0.0	1	1	0.0	0.0
4	12.500	0	0	0 +0.0	1.30	0.0	0.0	1	1	0.0	0.0
5	12.500	0	0	0 +0.0	-1.30	0.0	0.0	1	1	0.0	0.0
6	12.500	0	0	0 +0.0	-3.90	0.0	0.0	1	1	0.0	0.0
7	12.500	0	0	0 +0.0	-6.50	0.0	0.0	1	1	0.0	0.0
8	12.500	0	0	0 +0.0	-9.10	0.0	0.0	1	1	0.0	0.0

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Plan of antenna system



Side of antenna system



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Antennas arrays data

A. Antennas array azimuth (°/N)	0
B. Number of antennas	8
C. Nominal power supply (W)	1000.00
D. Losses (addit. + cables) (dB)	0.0
E. Effective power supply (W)	1000.00
F. Theor. maximum gain (dBd)	13.19
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	13.19
I. Compensation losses (dB)	0.00
J. Effec. max gain [H - I] (dBd)	13.19
K. Effec. max gain (times)	20.84
L. Effec. max power [E * K] (KW)	20.8415
M. Max power depr. angle (°)	0.0
N. Max power az. angle (°)	0

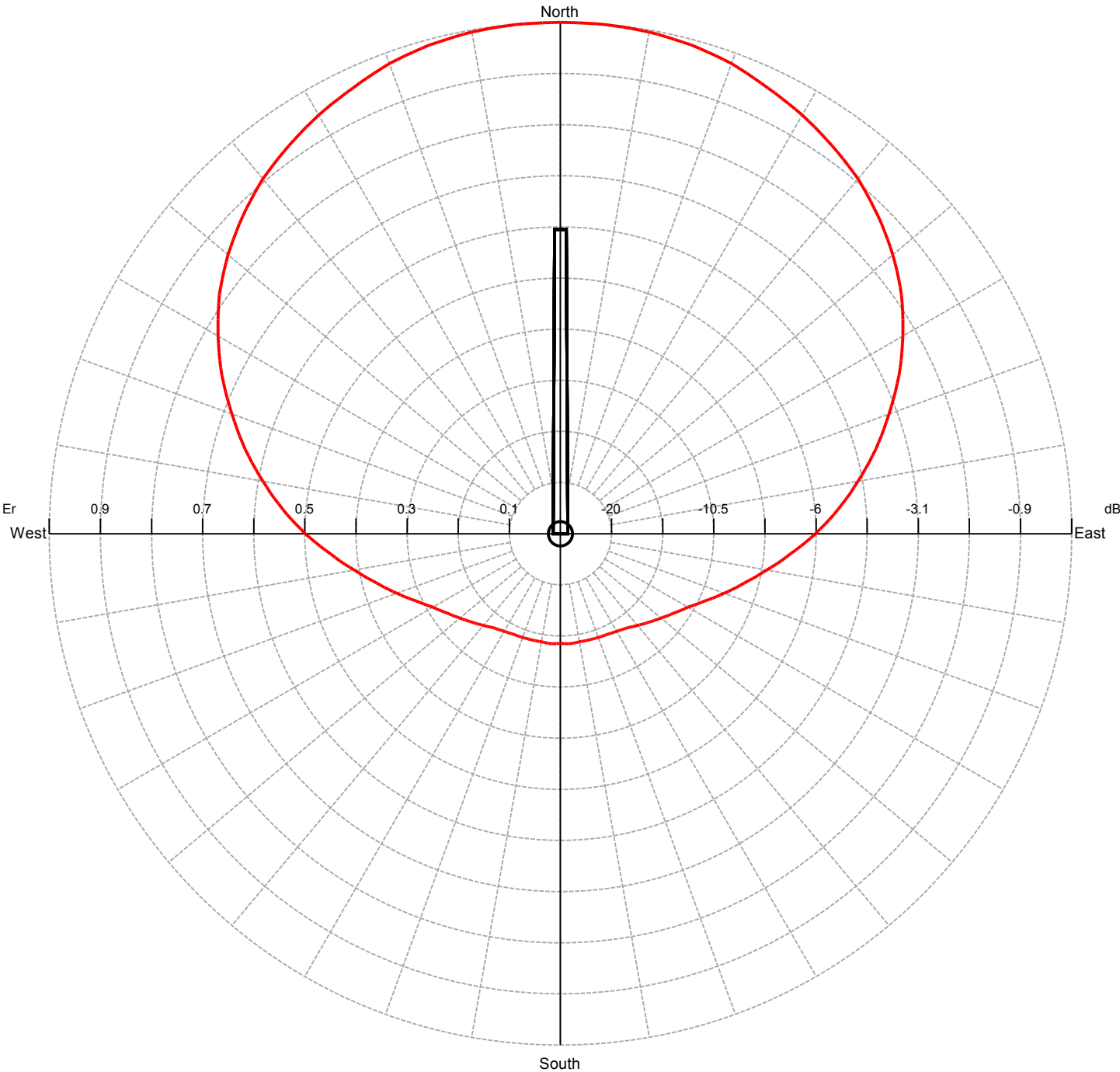
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	13.2	90	7.2	180	-0.2	270	7.2
10	13.2	100	5.4	190	-0.2	280	8.6
20	13.0	110	3.8	200	-0.1	290	9.9
30	12.7	120	2.4	210	0.0	300	11.0
40	12.3	130	1.4	220	0.6	310	11.8
50	11.8	140	0.6	230	1.4	320	12.3
60	11.0	150	0.0	240	2.4	330	12.7
70	9.9	160	-0.1	250	3.8	340	13.0
80	8.6	170	-0.2	260	5.4	350	13.2

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Horizontal diagram at 0.0° depres. (Total Antenna)

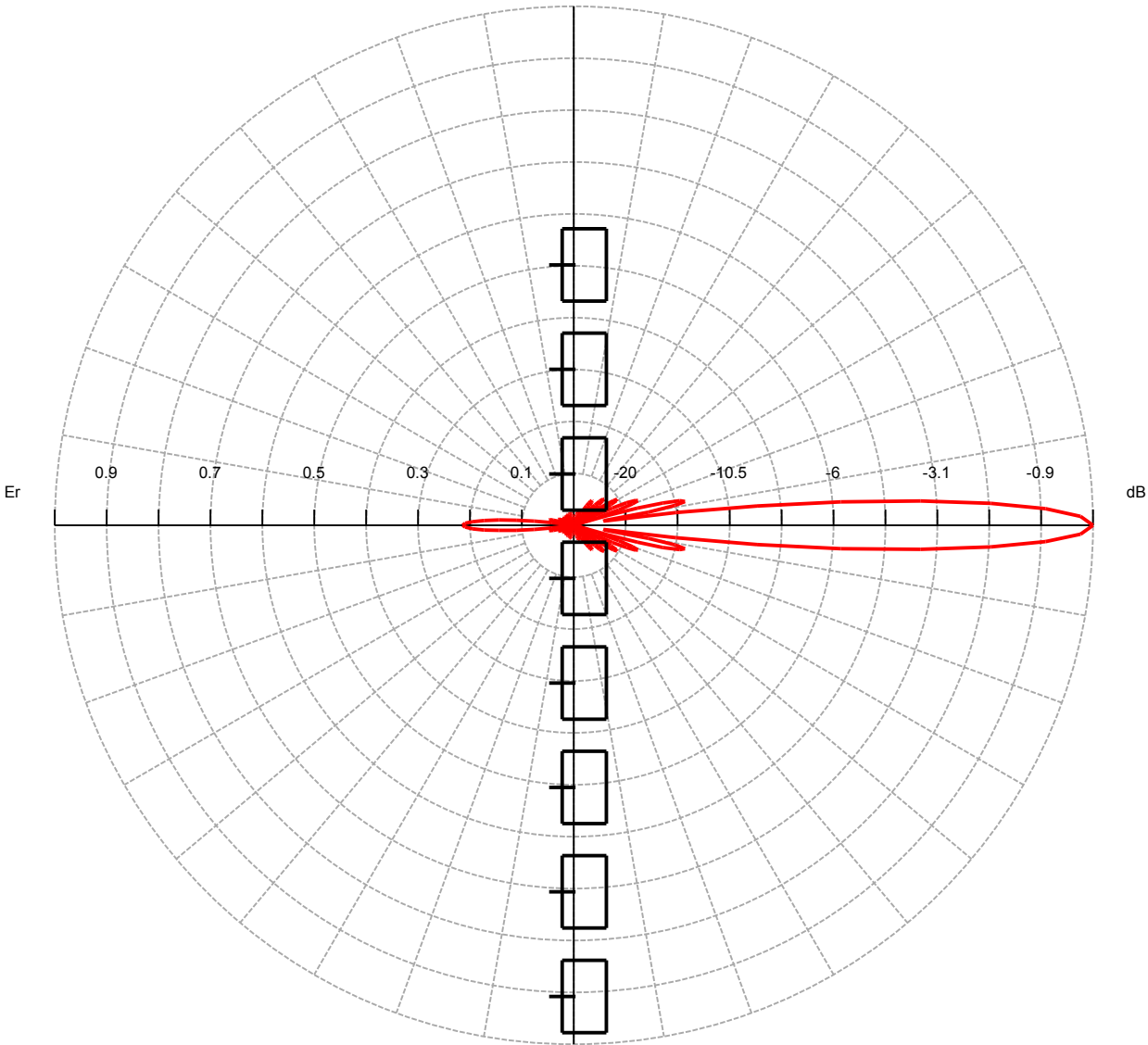


0.0° depres. (Total Antenna), Gain (dBd): 13.19 ERP T.Max(KW): 20.8415 ERP E.Max(KW): 20.8415

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Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 13.19 ERP T.Max(KW): 20.8415 ERP E.Max(KW): 20.8415